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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/085,396

02/28/2002

David B. Wallace

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12/01/2006

DUANE MORRIS LLP  
IP DEPARTMENT  
30 SOUTH 17TH STREET  
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EXAMINER

HARTMAN JR, RONALD D

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/085,396

Applicant(s)

WALLACE, DAVID B.

Examiner

Ronald D. Hartman Jr

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Examiner Note***

In order to clarify the position of the Office, the finality of the rejection of the last Office action, mailed on 3/21/2006, is withdrawn.

### ***Priority***

This application repeats a substantial portion of prior Application No. 09/167,379, filed 10/06/1998, and adds and claims additional disclosure not presented in the prior application. Since this application names an inventor or inventors named in the prior application, it may constitute a continuation-in-part of the prior application. Should applicant desire to obtain the benefit of the filing date of the prior application, attention is directed to 35 U.S.C. 120 and 37 CFR 1.78.

That being said, the effective priority date for the new features, which are claimed in claim 17 and 19-20, is the filing date of the instant application, that being 2/28/2002.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17 and 19-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims 17 and 19-20, the applicant claims, "automatically ordering additional dry bulk materials ...", however, this feature is not adequately disclosed by the specification, as originally filed. The specification discloses, in [0003], "a phone call is placed from the plant site to an outside vendor to order another shipment of raw

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materials.” Nowhere does the specification disclose that the phone call takes place automatically.

Furthermore, claims 17 and 19-20 also claim, “automatically directing a transport vehicle to deliver ...”. This feature is not adequately supported by the specification, as originally filed.

It should be noted that applicant has filed a through declaration describing the invention that he has created and the dates of invention. Applicant goes into great detail about the steps that were taken and the obstacles that were overcome to take the idea from the conception to a reduction to practice. However, applicant's declaration does not refer to creating an invention that automatically orders or automatically directs the transportation of material to be delivered. It should be noted that there is a difference between the automated sending of a signal concerning the amount of material in a bin and the automated sending of a command to transport more material. The former constitutes the mere transmission of data that does not mandate the requirement of any action, a data collection system. Whereas the latter requires that the transportation of the material occur, a transportation and supply system.

Automation is considered to mean that it requires the use of a machine to perform the process without human intervention. This has been the standard definition that has been used for this word and its root, see Merriam Webster's Collegiate Dictionary 10<sup>th</sup> Edition. Nowhere in applicant's specification does applicant state that the ordering or directing of transportation or delivery of the materials is automated.

Applicant's declaration is insufficient to overcome this rejection.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(f) he did not himself invent the subject matter sought to be patented.

Claims 17, 19, and 20 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter.

Applicant has admitted in the Affidavit filed under 37 CFR 1.131 filed on 10/11/2006 that:

7. I am not trained as an engineer, nor do I possess any special education or background in any of the engineering or scientific arts. and

8. As a consequence of my lack of the engineering skill necessary to pursue my invention, it has been necessary for me to seek the advice and assistance of companies and individuals that specialize in the design and manufacture of inventory level systems in order to both memorialize my conception of the invention and to reduce it to practice.

While one does not have to be a scientist or an engineer to be an inventor, all that is required is that one conceive of the invention and reduce it to practice. See Pannu v. Iolab Corp., 47 USPQ2d 1657, 1663 (Fed. Cir. 1998)

All that is required of a joint inventor is that he or she (1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art.

In this instance, applicant needed the services of Apptech Engineering to assist in the invention.

13. On or about February 12, 1996, Fred Coffey discussed options for using Apptech Engineered Systems' plumb bob system in such a manner to provide the ability to receive updates from multiple silo-based units back to a central computer. Fred thought that Apptech Engineered Systems could design a "black box" for each site which could work on a modem line.

However, Apptech Engineered Systems had not done this at this point and a special technician would have to be assigned. (Underlining added)

19. On or about March 28, 1996, Peter Wells of Apptech Engineered Systems, conducted a sales presentation at J.P. Donmoyer. Peter Wells was the technical representative working at the direction of Fred Coffey. (See paragraphs 13-17 above). Peter presented a potential embodiment of my invention incorporating a "black box" to operate as a remote telemetry unit. This devise would transmit data, via modem, to any source chosen via a phone line. (Underlining added)

It appears from the Affidavit sets forth that the heart of the invention is the Remote Telemetry Unit or "Black Box". This is not an item that can be purchased off the shelf and from applicant's affidavit it was not certain that this invention would work. It was only after it was installed and tested that applicant believed that the "Black Box" would work. Applicant cannot claim that he is the sole invention of the subject matter of this application since applicant has admitted that he did not have any skills to reduce the invention to practice and it was only with the assistance of others that applicant was able to create a "Black Box" that allowed data to be transmitted.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mowery et al., U.S. Patent No. 5,983,198, in view of Schliefer et al., U.S. Patent No. 4,615,351.

As per claims 17 and 20, Mowery et al teaches a method comprising:

- generating a first signal representative of an existing bulk material quantity at a remote site (e.g. generation of “quantity signals” outputted from sensors which are fitted to the storage containers; Figure 1);
- transmitting a second signal corresponding to the first signal from the remote site to at least one computer at predetermined time intervals (e.g. transmitting a “level signal” from the RTU to the central station; Figure 1);
- determining the existing bulk material quantity and projected material usage rate for the existing bulk material quantity based on the transmitted signals (e.g. Figure 2 elements 206, 208 and 210; C4 L14-20 and C4 L33-45);
- ordering additional bulk materials from a pre-selected vendor based on the existing material quantity and the projected material usage rate (e.g. an order being placed to a shipping terminal; Figure 1);
- providing a transport vehicle to deliver the additional bulk material from the vendor to the manufacturing site (e.g. Figure 1, elements 118 and 102); and
- transporting the additional bulk material from the vendor to the site, whereby additional bulk material is supplied to the site before the existing bulk material is depleted (e.g. C3 L44-50 and C4 L26-32).

As per claims 17 and 20, Mowery et al. does not specifically teach a dry bulk material being monitored.

Schliefer et al. teaches a method of monitoring the surface level of a material in a vessel, wherein the material is in a dry form (e.g. Figure 2; “bulk solid”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Schliefer into the system disclosed by Mowery et al for the purpose of allowing Mowery’s system to be utilized in a manufacturing site which uses dry materials stored in bulk so that the level of the materials may be known at any point in time, including the future, so that the material quantity can be effectively maintained, monitored and controlled, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

As per claim 20, Mowery et al. further teaches the use of ultrasonic level detectors (e.g. C3 L51-53).

As per claims 17 and 20, automatically ordering materials and automatically directing vehicles for shipping the ordered materials is adequately anticipated by the combined system of Mowery et al. (e.g. See Figure 1, elements 18 and 102, C3 L44-50 and C4 L26-32).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mowery et al., U.S. Patent No. 5,983,198, in view of Schliefer et al., U.S. Patent No. 4,615,351, in further view of Graves et al., U.S. Statutory Invention registration No. H1743.

As per claim 19, the rejection of claim 17 is equally applied herein.

As per claim 19, Mowery's combined system does not specifically teach producing an audible or visual alarm, via the central computer, when the material level falls below a predetermined level.

Graves et al. teaches a control room alarm box for use in issuing visual or audible alarms when levels in storage fall below a predetermined level (e.g. C9 L30-49 and C11 L37-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Graves et al. into Mowery's combined system for the purpose of providing an indication when quantity levels fall below a predetermined level so that the levels may be replenished without hindering the performance of the manufacturing site, and this would have been obvious to one of ordinary skill in the art at the time the invention was made.

### ***Response***

Applicant's brief has been considered. In view of the advisory action mailed June 2, 2006, prosecution on the merits is reopened. It is not believed that applicant's declaration can be used to antedate the references since the declaration makes no



mention of the automation of the order or directing of material for replenishment. As stated above, the effective date for this feature is the filing date of the instant application February 28, 2002 and the rejection stands.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D. Hartman Jr. whose telephone number is (571) 272-3684. The examiner can normally be reached on Mon.-Fri., 11:00 - 8:30 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Anthony Knight

Supervisory Patent Examiner

Art Unit 2121

November 16, 2006

RDH